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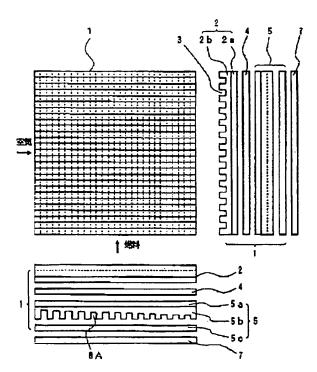
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TITLE

PHOSPHORIC ACID FUEL CELL AND

MANUFACTURE THEREOF



ABSTRACT :

PROBLEM TO BE SOLVED: To stably operate a fuel cell for a long time by improving the distribution of the amount of hydrogen in a fuel gas within the surface of a unit cell and the amount of oxygen in air.

SOLUTION: A unit cell 1 is constituted by interposing a matrix 4 containing phosphoric acid between an air electrode 2 comprising an air electrode base material 2b having a plurality of air flow grooves 3 arranged in parallel and an air electrode catalyst layer 2a and a fuel electrode 3 comprising a fuel electrode base material 5b having a plurality of fuel gas flow grooves 6A arranged in parallel, so as to perpendicularly cross to the air flow groove 3, a fuel electrode catalyst layer 5a, and a reservoir plate 5c, and unit cells are alternately stacked with a separating plate 7 to constitute a fuel cell stacked body. A plurality of fuel gas flow grooves 6A are constituted with a plurality of flow grooves in which the width of the flow path is almost the same, and the depth of the flow path is made gradually deeper toward the air inlet side and shallower toward the air outlet side.

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